DOI: 10.18502/jfrh.v18i4.17425

Original Article

Exploring the Physical and Mental Health Challenges of Teenage Pregnancy: A Qualitative Study in the Tamale Metropolis, Ghana

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Received September 2024; Revised and accepted November 2024

Abstract

Objective: Teenage pregnancy poses significant public health challenges globally, particularly affecting the physical and mental well-being of adolescent girls. Despite a global decline in teenage birth rates, regions like sub-Saharan Africa continue to experience high prevalence. In Ghana's Tamale metropolis, teenage pregnancy rates have shown a concerning rise, underscoring the need for an in-depth exploration of its multifaceted impacts. This study aims to explore the physical and mental health effects of teenage pregnancy in the Tamale metropolis, capturing their personal experiences and coping mechanisms.

Materials and methods: Employing a qualitative exploratory descriptive design, the study conducted a focus group discussion with 10 first-time teenage mothers aged 13–19 whose babies were less than 1 month. Participants were purposively sampled from antenatal records across five Community-based Health Planning and Services (CHPS) compounds. Discussions, guided by the socioecological model, were transcribed, translated, and thematically analyzed using NVivo software.

Results: Participants reported numerous physical health challenges, including severe nausea, vomiting, exhaustion, musculoskeletal pain, and infections like candidiasis. Mental health struggles encompass feelings of sadness, irritability, anxiety, and societal-induced stress. Coping strategies varied, with reliance on trusted individuals, avoidance of social situations, support from healthcare professionals, and family backing emerging as predominant themes.

Conclusion: This study revealed profound physical and mental health challenges compounded by societal stigma and limited resources. Strengthening social support networks, reducing stigma, and promoting patient-centered care are imperative. Targeted interventions are also essential to enhance health outcomes for these young mothers and their children.

Keywords: Teenage Pregnancy; Physical Health; Mental Health; Coping Strategies

Introduction

Teenage pregnancy also known as adolescent pregnancy refers to a pregnancy that occurs in females aged between 13 and 19 years old. Adolescent pregnancy is a significant public health issue worldwide, affecting the physical and mental health of teenage girls (1). Globally, the Adolescent birth rate (ABR) has decreased from 64.5 births per

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1000 women (15–19 years) in 2000 to 41.3 births per 1000 women in 2023. However, rates of change have been uneven in different regions of the world with the sharpest decline in Southern Asia (SA), and slower declines in the Latin American and Caribbean (LAC) and sub-Saharan Africa (SSA) regions (2). In 2019, adolescents aged 15–19 years in low- and middle-income countries (LMICs) had an estimated 21 million pregnancies each year, of which approximately 50% were unintended and resulted in an estimated 12 million births (3). Also, 55% of the unintended pregnancies ended in abortions, which are often unsafe in LMICs (4). In Ghana, the pooled prevalence of adolescent pregnancy increased from 11% (5) to 15.4% in 2022 with rural areas (19.5%) having a higher prevalence of adolescent pregnancy than urban areas (10.6%) (6). The Northern region recorded 13%, 11%, and 10% of adolescent pregnancy cases within the periods of 2011 to 2013 respectively (7). According to the GDHS, the Northern region recorded one of the highest (14%) rates of teenage pregnancy (6). Adolescent pregnancy often tends to be higher among those with less education or low economic status (8). The Tamale Metropolis has one of the lowest net enrolment rates for girls in primary (51%) and secondary (27%) cycles (9). These young mothers face unique challenges that can adversely affect their health and well-being during and after pregnancy. Adolescent mothers are more likely to experience adverse physical health outcomes due to inadequate prenatal care, nutritional deficiencies, and limited access to healthcare services (10, 11). Physical health is the state of complete well-being and physical fitness of an individual hence these challenges can in the long term affect the mother and child's health. Equally critical are the mental health implications of teenage pregnancy. Pregnant adolescents are at a higher risk of depression, anxiety, and stress-related disorders compared to their non-pregnant peers (12). The stigma and social isolation associated with teenage pregnancy further compound these mental health challenges (13). Preventing pregnancy among adolescents and pregnancy-related morbidity and mortality are foundational to achieving positive health outcomes across the life course and imperative for achieving the Sustainable Development Goals (SDGs) related to maternal and newborn health (14). More so, teenage mothers have about 30%, and 50% chances of becoming pregnant again within a year, and two years after the first pregnancy respectively exposing them to these same challenges (15). Some studies (7, 16–20) have explored different scopes of teenage pregnancy but there however is a paucity of data in capturing data through a qualitative lens employing FGD. This study therefore aims to explore the physical and mental health effects of teenage pregnancy by capturing the stories of teenage mothers to uncover the different challenges they faced during pregnancy and the strategies they employed to navigate their health and mental well-being.

Materials and methods

Study Design and Setting: This qualitative study was based on an exploratory descriptive design, using focus group discussion (FGD) to explore the effect teenage pregnancy has on the physical and mental health of adolescent mothers in the Tamale metropolis.

Study Population and sample size: Eligibility criteria included first-time adolescent mothers aged 13–19 years whose babies were less than a month old. They were willing to participate, could communicate in the language used for the FGD (Dagbani), and resided within the study area. Individuals who did not meet these criteria were excluded. A total of 10 participants were included in the study. This sample size was determined based on the principles of qualitative research, which prioritize in-depth exploration over large sample sizes, as well as to avoid data saturation (21, 22) .

Sampling Procedures: Participants were recruited purposively facilitated by community health volunteers. The purposive sampling strategy was employed to select participants based on the antenatal records and child welfare clinic services from five Community-based Health Planning and Services (CHPS) compounds in the Tamale metropolis.

Data Collection Procedure: FGD was conducted in one of the CHPS selected by the participants, ensuring a comfortable environment. It lasted approximately 30 minutes and was conducted in the native language – Dagbani, which the researchers are fluent in. An interview guide was developed and pilot-tested and discussions were guided by the five levels of the socioecological model (SEM) (23). The team: two midwives, one public health nurse, a nutritionist, and a general nurse had extensive experience in qualitative research and maternal and child health. A small sample of participants (n=5) who met the study's inclusion criteria participated in the pilot test. These individuals were not included in the final study to avoid any potential biases.

Feedback from the pilot test was used to adjust the wording of questions, ensure the appropriateness of the language used, and confirm that the questions effectively captured the intended information. The pilot test also allowed the research team to estimate the time required for the FGD. The Committee on Human Research, Publication, and Ethics (CHRPE) approved the study with the identification number: CHRPE/AP/102/2.

Data Quality Assurance: To ensure data quality, we pilot-tested interview guides, trained facilitators, and audio-recorded FGDs with participant consent, ensuring clarity and consistency in data collection.

Data analysis: The data analysis was carried out by a team of three researchers, all with extensive experience in qualitative research and thematic analysis. The thematic analysis was conducted following the five steps outlined by Braun and Clarke (23). The audio recordings were transcribed and formatted into a Word document, then imported into NVivo software. The data was coded based on themes from the interview guide and socioecological model and analyzed using NVivo's query functions. In cases of disagreements, the team revisited the original transcripts and coded data.

Results

All 10 participants were females between the ages of 13-19 years. See Table 1 for detailed demographic characteristics of the participants

Table 1: Demographic characteristics of participants

Demographic characteristics	No. of participants
Age	
13-15	1
16-18	8
> 19	1
Marital status	
Single	2
Married	2
Co-habiting	6
Education	
No education	2
Primary	3
Secondary	5

Theme 1: Physical Health

A significant number of participants reported experiencing severe nausea and vomiting, commonly referred to as morning sickness. Participants also described a pervasive sense of exhaustion that was exacerbated by sleep disturbances. Many participants also experienced musculoskeletal pain, particularly in the lower back, hips, and pelvis. Participants recounted.

"*The pain in my lower back was constant, especially when I was on my feet for too long. It made simple tasks like walking or standing very difficult. My feet were also so swollen that I couldn't wear my shoes. It was painful and alarming."*

"I felt like I couldn't catch my breath, especially when I was trying to sleep. It was really frightening."

"I had candidiasis, lower abdominal pain, loss of appetite and body weakness when I went for antenatal care the following month and complained I was referred to the Teaching hospital to receive treatment for the candidiasis. They gave me some drugs and I took."

"I sometimes experienced pain around my navel anytime my baby kicked, I also experienced vomiting, and sometimes difficulty in sleeping."

"I was unable to walk properly and when I walked short distances, I got so tired. It was as though my stomach was too big for me to carry."

"I was always told my blood was not enough and they asked me to eat a lot of the green leafy vegetables. Honestly speaking I used to take the drugs they prescribed for me but still and I was eating well to so I don't know why I was always facing this problem."

"The nurses said my baby was too small when I gave birth. I don't know if it's because of the local medicine I took to help me deliver vaginally that reduced my baby's size because I was eating well."

Others also said:

"As for me, they had to perform surgery on me. My time for delivery had not reached but they asked me to come and they will remove my baby. When they removed him, he was so small that they had to admit us into the NICU for almost two weeks. They should have just allowed me to keep the pregnancy till term because NICU was very discomforting".

"I was always sick and admitted to the hospital. I couldn't eat anything and sometimes the little I ate I would vomit. They always gave me infusions because I was weak. I didn't think I was going to survive but thanks be to God I did."

Theme 2: Mental Health

The participants in this study described a range of mental health challenges encountered during their pregnancies. Many reported experiencing intense emotional fluctuations, with common emotions such as sadness, irritability, and overwhelming stress.

"*I used to get angry too quickly and I could easily cry. I felt like nobody understood what I was going through, not even my partner at times. It was incredibly lonely*."

Another participant discussed feelings of self-consciousness and anger:

"There were also times I felt when I was walking people were staring at me. It got me very angry. I didn't know whether they were saying good or bad things but I knew they were bad things (laughs)."

The stress of unmet expectations and family pressure was a recurring theme:

"*I had to stop school because of the pregnancy. Sometimes some of my friends came to the house to visit me. When they left my mother would start insulting me which made me angry. I know she is right to be angry because I am supposed to finish school and marry before I get pregnant but I am not God. God said it should happen and it did."*

In some cases, participants had to make significant life adjustments to cope with societal and family pressures:

"I had to let the man come and pay my dowry immediately so I could move to his family house. I knew if I didn't I was not going to find it easy at home."

Some participants also expressed their anxiety about the future:

"I was constantly worried about how I would manage everything after the baby arrived. The future seemed so uncertain and overwhelming which made me unable to eat sometimes."

Financial concerns also added to the stress of some participants:

"I was already married so I wasn't worried about the pregnancy, my only worry was what the nurses advised me to eat my husband could not provide so it was worrying me a lot."

Some also discussed how societal judgment and family disputes exacerbated their emotional distress:

"I heard one of my former teachers used me as an example in school and advised others not to follow my footsteps. I wanted to go and insult him because I was angry. It made me very sad."

"The family of the man that impregnated me and my family quarreled because they said I was a bad girl and they were not sure it was for their son. I cried day and night because it's only God who knew the truth. When I gave birth, the boy resembled him so they had to come and pay my bride price and send me to their house."

"Some of my friends did not want to associate with me any longer because they felt I was a bad girl. I was aware they also slept with men just that they were lucky not to have gotten pregnant. I even knew one of them who was been sleeping with several men but for me it was just once."

Theme 3: Coping Strategies

Many participants highlighted the importance of discussing their issues with trusted persons. One stated:

"I used to discuss my problems with trusted family members and friends. Other times listening to music and watching movies helped me."

"My paternal grandmother was very helpful. She cautioned everyone not to insult or treat me badly. I could talk to her about everything and she used to tell me stories of her own pregnancy experiences. So anytime I had or felt anything I would go to her."

Some participants adopted avoidance strategies to protect themselves from potential stigma:

"I stopped attending occasions or programs. I avoided where people were grouped so they don't point fingers or talk bad of me."

"Same with me even in the compound you won't see me I was always in the room. The only time you see me is when I want to urinate or eat."

Participants noted that supportive nurses played a significant role in their emotional well-being

"Some of the nurses too were very helpful. They sometimes engaged me in conversations to know my problems and gave me possible solutions to them. They didn't treat me bad at all. I was very happy talking to them."

"I was always given special attention when I went for ANC. It was as though I was a rich woman because we always think it's the rich people who get special attention in health facilities. One nurse even came to my house to advise my caretakers on what I needed to eat. After her visit things changed for the better."

Adopting an indifferent attitude towards others' opinions was another coping strategy.

"I didn't care what anyone said about me at the time. I lived an i-don't-care life and it helped."

Family support, particularly from family, partner, and partner's family, was crucial for some participants.

"I asked my partner to enroll me into learning to weave and he did so when day breaks, I go to the shop and because there was plenty of work there was no time to be thinking about what other people thought of you."

"My parents were angry at first but I think in the

fourth month they forgave me. I thanked God for touching their hearts. My parents did their best for me."

"My partner did not have a permanent job at the time, he was doing by-day. Despite this, my partner tried to meet my requests whenever possible. I was considerate and avoided being too demanding, understanding that my partner was doing their best with limited resources."

Discussion

The findings from this study provided valuable insights into the complex challenges faced by adolescent pregnant girls which include severe nausea, vomiting, exhaustion, musculoskeletal pain, and other complications. Severe nausea and vomiting, often referred to as morning sickness, were common, leading to dehydration, malnutrition, and discomfort. Exhaustion, exacerbated by sleep disturbances, was a significant issue, with the inability to achieve restful sleep and fatigue having far-reaching implications on their daily functioning and emotional health. This is consistent with findings from other studies (24, 25) focusing on the health consequences of teenage pregnancy on adolescent girls. This study observed infections, including candidiasis and lower abdominal pain, similar to other research findings (26,). This highlights the importance of vigilant antenatal care and underscores the healthcare provider's crucial role in managing infections that can endanger the mother and fetus. The complexity of prenatal care and the potential complications associated with teenage pregnancy underscore the importance of continuous monitoring and personalized care. In another study, pregnant teens were not using prenatal care because of the adolescent's lack of knowledge, and the humiliation the girls deal with before receiving prenatal care (27). Persistent health issues in this study and as reported in some studies (27–29) further emphasize the emotional burden carried by these girls despite adherence to prescribed medical advice. Health challenges as reported in this study deepen the emotional strain experienced by these girls. The frustration and confusion expressed by some revealed a disconnect between their expectations and the actual healthcare outcomes, emphasizing the need for more effective communication and support from healthcare providers. This study again highlights the significant mental health challenges experienced by pregnant teenagers, revealing the interplay of emotional, social, and financial factors. Emotional fluctuations, feelings of sadness, irritability, overwhelming stress, anger, loneliness, and self-consciousness were prevalent, highlighting the vulnerability that many of these girls face when societal expectations and personal circumstances collide (30, 31). The pressure of unmet expectations, particularly in family dynamics, can lead to feelings of guilt and anger, leading to significant life adjustments to mitigate stress and align with societal expectations (32). In contexts where societal and familial pressures are intense, there is a need for targeted mental health support that addresses their unique challenges, especially for those who may be vulnerable to societal judgment and financial insecurity. One of the key findings of this study on the coping strategies these girls employ to navigate this period is the crucial role of social support in mitigating the impact of teenage pregnancy on the well-being of adolescent mothers. Some highlighted the importance of discussing their problems with trusted individuals, such as family members and friends, as a primary coping mechanism. These findings are consistent with existing research that stresses the protective effects of social support on mental health, particularly during periods of significant stress, such as pregnancy (28, 29). Participants in this study who relied on their grandmothers for guidance and emotional support reflect the value of intergenerational support, which can provide both emotional comfort and practical advice based on lived experiences (33, 34). In contrast, some participants employed avoidance strategies to protect themselves from the stigma and judgment often associated with teenage pregnancy. Adolescent mothers often avoid social gatherings and isolate themselves, highlighting the impact of societal perceptions on their mental health. This behavior highlights the need for community-level interventions to address stigma and foster supportive environments. Healthcare providers positively influence the emotional well-being of teenage pregnant girls. Some adopt an indifferent attitude towards societal opinions, requiring emotional resilience. Additional support mechanisms are needed to help adolescent pregnant girls navigate external pressures. Strong support from partners and families can alleviate financial and material challenges and provide emotional stability. Family support's role in enhancing adolescent mothers' resilience is well-documented in literature (33,35), where supportive family environments are linked to better mental health outcomes and improved maternal and child health.

Limitations: The study faced some limitations, including a small sample size of 10 participants, potential bias in self-reporting, limited generalizability due to the study's location and cultural context, and language and interpretation challenges. To address these limitations, the study employed a purposive sampling strategy and FGD to ensure rich, in-depth information. The study also addressed potential bias by conducting interviews in a comfortable environment, using an interview guide, and using the SEM to frame the findings within a broader theoretical context. The transcription and translation process were conducted with care, preserving original meanings and cultural nuances. Emotional challenges were also addressed by ensuring informed consent and confidentiality, providing emotional support during FGD, and ensuring participants' right to withdraw at any time. The study was reviewed and approved by the CHRPE, providing oversight for the ethical conduct of the research.

Conclusion

This study revealed profound physical and mental health challenges compounded by societal stigma and limited resources among teenage pregnant girls. Strengthening social support networks, reducing stigma, and promoting patient-centered care are imperative. Targeted interventions are also essential to enhance health outcomes for these young mothers and their children.

Conflict of Interests

Authors declare no conflict of interests.

Acknowledgments

The authors would like to thank all healthcare providers of the five Community-based Health Planning and Services (CHPs) sampled in the metropolis and all the participants for their willingness to participate in the study. The authors declare no competing interests.

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Citation: Tahiru R, Kona C, Nyari A, Mohammed T, Pawmang DA. **Exploring the Physical and Mental Health Challenges of Teenage Pregnancy: A Qualitative Study in the Tamale Metropolis, Ghana.** J Family Reprod Health 2024; 18(4): 246-52.